

REMARKS/ARGUMENTS

This is a Response to the Office Action mailed April 13, 2006, in which a three (3) month Shortened Statutory Period for Response has been set, due to expire July 13, 2006. Enclosed is our check to cover the fee for a one-month extension of time, to August 13, 2006. Twelve (12) claims, including one (1) independent claim, were paid for in the application. Claims 1-10 are currently amended. Claims 13-20 have been added. No new matter has been added to the application. No fee for additional claims is due by way of this Amendment. The Director is authorized to charge any additional fees due by way of this Amendment, or credit any overpayment, to our Deposit Account No. 19-1090. Claims 1-20 are pending.

Rejections Under 35 U.S.C. § 112, First Paragraph

Claims 1-12 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. In particular, the Examiner contends that the specification is enabling for the case where an antireflection film is inorganic and does not reasonably provide enablement for other films, such as organic films (*e.g.*, antihalation film).

It is understood that the Examiner further contends that the specification is enabling for a concavo-convex pattern provided on a surface of a light transmittable substrate and covered by a second antireflection film, and non-enabling for the case where the concavo-convex pattern provided on the surface of the light transmittable substrate is without the second antireflection film covering.

Claims 1, 3-7, 9 and 10 have been amended to recite an inorganic antireflection film, thereby complying with the first enablement requirement pertaining to the antireflection film. Claim 2 has been amended to include the second inorganic antireflection film covering the concavo-convex pattern provided on the surface of the light transmittable substrate, thereby complying with the second enablement requirement set forth above. Thus, claims 1-7 and 9-10 comply with the enablement requirements and are believed to be allowable, as are claims 8, 11 and 12, which depend therefrom.

Rejections Under 35 U.S.C. § 102(b)

Claims 1 and 11 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hamada (JP 07-281583).

The disclosed embodiment of the invention will now be discussed in comparison to the applied reference. Of course, the discussion of the disclosed embodiment, and the discussion of the differences between the disclosed embodiment and the subject matter described in the applied reference, do not define the scope or interpretation of any of the claims. Instead, such discussed differences merely help the Examiner to appreciate important claim distinctions discussed thereafter.

According to one embodiment, a holographic recording carrier includes a holographic recording layer sandwiched between light transmittable substrates. A first inorganic antireflection layer and a second inorganic antireflection layer are formed on respective outer surfaces of the light transmittable substrates. A concavo-convex pattern is formed on a surface of one of the light transmittable substrates for positioning the object and reference beams, and detecting the address of a region in which data is recorded or from which data is reproduced. The concavo-convex pattern may be positioned opposite the incidence direction of the object and reference beams or on the incidence side of the object and reference beams. The concavo-convex pattern may be covered by one of the first or second inorganic antireflection layers.

Claim 1 recites, *inter alia*, “a first inorganic antireflection film formed on one surface of the holographic recording carrier and a second inorganic antireflection film formed on the other surface of the holographic recording carrier” (emphasis added).

Hamada teaches a hologram recording film including a sensitive material layer 1 sandwiched between respective substrates 2, 3. Optical adhesive layers L are respectively formed on the substrates 2, 3. Colored films N are respectively formed on the optical adhesive layers L and a non-reflective coat layer C is formed on the optical adhesive layer L located on an incidence side of a laser light 22. The non-reflective coat layer C on the incidence side of the laser light 22 has different optical characteristics than the colored film N located opposite the incidence direction of the laser light 22.

The Examiner contends that the colored film N is effectively an antihalation layer for preventing reflections. Furthermore, it is known in the art that the antihalation layer is of organic material. Thus, Hamada discloses having the non-reflective coat layer C on the incidence side of the laser light 22 and the organic antihalation layer opposite the incidence side of the laser light 22. In other words, Hamada discloses having an organic layer on at least one side of the hologram recording film (*e.g.*, opposite the incidence side of the laser light 22). Unlike the present application, Hamada does not disclose having an inorganic antireflection film on both surfaces of the hologram recording film.

Hamada does not teach all the limitations of independent claim 1. Thus, claim 1 is allowable over Hamada, as is claim 11, which depends therefrom.

Claims 1 and 11 were rejected under 35 U.S.C. § 102(b) as being anticipated by Ishikawa (JP 05-281883).

Similarly to Hamada, Ishikawa discloses a recording film including a sensitive material layer 2a sandwiched between colored films 2b, 2c. A non-reflective coat layer 2d is formed on the colored film 2b located on the incidence side of a beam emitted from laser 10. The Examiner contends that the colored films 2b, 2c are effectively antihalation layers. Furthermore, it is known in the art that the antihalation layer is of organic material. Thus, Ishikawa discloses having the non-reflective coat layer 2d on the incidence side of the beam emitted from laser 10 and the organic antihalation layer opposite the incidence side of the beam. In other words, Ishikawa discloses having an organic layer formed on at least one side of the recording film (*e.g.*, opposite the incidence side of the beam). Unlike the present application, Ishikawa does not disclose having an inorganic antireflection film on both sides of the recording film.

Ishikawa does not teach all the limitations of independent claim 1. Thus, claim 1 is allowable over Ishikawa, as is claim 11, which depends therefrom.

Rejections Under 35 U.S.C. § 103

Claims 1-8 and 10-12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Furuya et al. (JP 2002-063733) in view of either Hamada or Ishikawa.

Claim 1 recites, *inter alia*, “a first inorganic antireflection film formed on one surface of the holographic recording carrier and a second inorganic antireflection film formed on the other surface of the holographic recording carrier” (emphasis added).

Furuya discloses a holographic recording carrier including a hologram recording layer 2 disposed with a substrate 1 adjacent at least one side of the hologram recording layer 2. The substrate 1 has an array of markers 3 positioned on an outer surface of the substrate 1. Furuya does not disclose, teach or suggest having an inorganic antireflection film on both sides of the holographic recording carrier. In other words, there is no inorganic antireflection film on the outer surfaces of both the substrate 1 and the hologram recording layer 2 or on the outer surfaces of both substrates 1 that sandwich the hologram recording layer 2.

As discussed above, neither Hamada nor Ishikawa disclose teach or suggest having an inorganic antireflection film on both surfaces of the holographic recording carrier. Thus, Hamada and Ishikawa fail to cure the deficiencies of Furuya.

Furuya, Hamada, and Ishikawa, alone or in combination, do not disclose, teach or suggest all the limitations of independent claim 1. Consequently, claim 1 is believed to be allowable, as are claims 2-8 and 10-12, which depend therefrom.

Claims 1-12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Furuya et al. (JP 2002-063733) combined with either Hamada or Ishikawa, further in view of Ryan et al. (U.S. Patent No. 3,833,383) and Cocanari (U.S. Patent No. 1,305,195).

Claim 1 recites, *inter alia*, “a first inorganic antireflection film formed on one surface of the holographic recording carrier and a second inorganic antireflection film formed on the other surface of the holographic recording carrier” (emphasis added).

As discussed above, neither Furuya, Hamada nor Ishikawa, alone or in combination disclose, teach or suggest all the limitations of amended claim 1. Furthermore, Ryan and Cocanari fail to cure the deficiencies of Furuya even when combined with Hamada or Ishikawa.

Ryan teaches a medium for holographic recording including a substrate film 1 having a photosensitive layer 2 on one side and an antihalation layer 3 on the other side. As discussed above, it is known in the art that the antihalation layer 3 is organic. Thus, Ryan does

not disclose, teach or suggest having an inorganic antireflection film on both sides of the holographic recording medium.

Similarly, Cocanari teaches a photographic or cinematographic film 1 having an antihalation coating 2 formed on one of its sides. Furthermore, Cocanari teaches another embodiment where the antihalation coating 2 is incorporated within the film 1. As discussed above, it is known in the art that the antihalation coating 2 is organic. Thus, Cocanari does not disclose, teach or suggest having the inorganic antireflection film on both sides of the photographic or cinematographic film 1.

Therefore, Furuya combined with Hamada or Ishikawa in view of Ryan and Cocanari do not disclose, teach or suggest all the limitation of amended independent claim 1. Consequently, Applicant respectfully asserts that claim 1 is allowable, as are claims 2-12, which depend therefrom.

Claims 1-12 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Furuya et al. (JP 2002-063733), in view of Yoshinaga et al. (JP 01-231082 and JP 01-040878).

As discussed above, Furuya does not disclose, teach or suggest all the limitations of amended independent claim 1. Yoshinaga ('082) and Yoshinaga ('878) fail to cure the deficiencies of Furuya. Both Yoshinaga ('082) and Yoshinaga ('878) teach forming an antireflection layer on a surface of a recording carrier. Neither Yoshinaga ('082) nor Yoshinaga ('878) teach forming an inorganic antireflection film on the surface of both sides of the recording carrier.

Thus, Furuya combined with Yoshinaga ('082) and Yoshinaga ('878) do not disclose, teach or suggest all the limitations of amended independent claim 1. Consequently, Applicant respectfully asserts that claim 1 is allowable, as are claims 2-12, which depend therefrom.

Conclusion

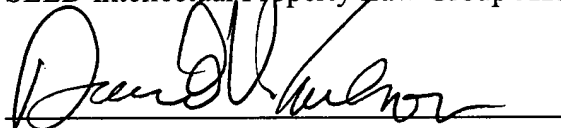
Overall, the cited references do not singly, or in any motivated combination, teach or suggest the claimed features of the embodiments recited in independent claims 1 and 13, and thus such claims are allowable. Because the remaining claims depend from the allowable

independent claims, and also because they include additional limitations, such claims are likewise allowable. If the undersigned attorney has overlooked a relevant teaching in any of the references, the Examiner is requested to point out specifically where such teaching may be found.

In light of the above amendments and remarks, Applicant respectfully submits that all pending claims are allowable. Applicant, therefore, respectfully requests that the Examiner reconsider this application and timely allow all pending claims. Examiner Angebrannt is encouraged to contact Mr. Carlson by telephone to discuss the above and any other distinctions between the claims and the applied references, if desired. If the Examiner notes any informalities in the claims, he is encouraged to contact Mr. Carlson by telephone to expediently correct such informalities.

Respectfully submitted,

SEED Intellectual Property Law Group PLLC

A handwritten signature in black ink, appearing to read "David V. Carlson", is written over a horizontal line.

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